

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/621,597	07/16/2003	Chi-Hui Lin	B-5160 621096-2	2594	
36716	7590 09/28/2004		EXAMINER .		
LADAS & P	ARRY RE BOULEVARD, SUI	SOWARD, IDA M			
	ES, CA 90036-5679	ART UNIT	PAPER NUMBER		
	,		2822		
		DATE MAILED: 09/28/2004			

Please find below and/or attached an Office communication concerning this application or proceeding.

Su	pplemental
Notice	of Allowability

Application No.	Applicant(s)	
10/621,597	LIN, CHI-HUI	
Examiner	Art Unit	
Ida M Soward	2822	

			İ
	Ida M Soward	2822	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not include will be mailed in due	ed course. THIS
1. 🛮 This communication is responsive to the telephone call from	m the law offices of Ladas and Parry	on September 1, 200	<u>)4</u> .
2. The allowed claim(s) is/are <u>1-32</u> .			
3. The drawings filed on 16 July 2003 are accepted by the Ex	aminer.		
 4. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" on the below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the period of the priority under 1. DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT In	been received. been received in Application No cuments have been received in this application. Set the submitted in the submitted in the submitted in the Set along the properties of the submitted in the	national stage applical complying with the recomplying state action of the state of the st	quirements OTICE OF
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. Notice of Informal Page 1. Interview Summary Paper No./Mail Date 1. Examiner's Amendm 1. Examiner's Stateme 1. Other	(PTO-413), e nent/Comment	ŕ
		Der-	

AMIR ZARABIAN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800

Application/Control Number: 10/621,597 Page 2

Art Unit: 2822

DETAILED ACTION

This Supplemental Office Action is in response to the telephone call from the law offices of Ladas and Parry on September 1, 2004.

Allowable Subject Matter

Claims 1-32 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose, make obvious, or otherwise suggest the structure of the applicant's together with the other limitations of the independent claims, in particular "A split gate flash memory cell, comprising: a substrate having a trench therein; a conductive layer disposed on the bottom of the trench; a pair of source regions, each disposed the substrate adjacent to one sidewall of the trench and electrically connected by the conductive layer; a source isolation layer disposed on the conductive layer; a pair of tunnel oxide layers, respectively disposed on one sidewall of the trench and on the source isolation layer; a U-shaped floating gate having a plurality of inside tips disposed on the source isolation layer and contacting tunnel oxide layers thereby; an inter-gate dielectric layer disposed on the U-shaped floating gate; a control gate disposed on the inter-gate dielectric; a conductive stud disposed on the control gate; and a drain region disposed in the substrate adjacent to the trench." The dependent claims being further limiting and definite are also allowable.

Application/Control Number: 10/621,597

Art Unit: 2822

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ida M Soward whose telephone number is 571-272-1845. The examiner can normally be reached on Monday - Thursday, 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IMS

September 7, 2004

AMIR ZAPABIAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Page 3